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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|----------------------------------------------------------------------------|-------------|-------------------------|-----------------------------|------------------|
| 10/660,825 | 09/12/2003 | Thomas Herbert Peterson | 134687NV (MHM 15085US01) | 7037 |
| 23446 7590 08/10/2007 MCANDREWS HELD & MALLOY, LTD 500 WEST MADISON STREET | | | EXAMINER | |
| | | | MEHTA, PARIKHA SOLANKI | |
| SUITE 3400 CHICAGO, IL 60661 | | | ART UNIT | PAPER NUMBER |
| | | | 3737 | |
| | | | | - |
| | | | MAIL DATE | DELIVERY MODE |
| | | | 08/10/2007 | PAPER |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------|-----|--|--|
| | Application No. | Applicant(s) | | | |
| | 10/660,825 | PETERSON, THOMAS HERBE | ERT | | |
| Office Action Summary | Examiner | Art Unit | | | |
| | Parikha S. Mehta | 3737 | | | |
| The MAILING DATE of this communication ap Period for Reply | pears on the cover sheet v | ith the correspondence address | | | |
| A SHORTENED STATUTORY PERIOD FOR REPL WHICHEVER IS LONGER, FROM THE MAILING E - Extensions of time may be available under the provisions of 37 CFR 1. after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period - Failure to reply within the set or extended period for reply will, by statut Any reply received by the Office later than three months after the mailin earned patent term adjustment. See 37 CFR 1.704(b). | DATE OF THIS COMMUN 136(a). In no event, however, may a will apply and will expire SIX (6) MO te, cause the application to become A | CATION. reply be timely filed NTHS from the mailing date of this communication. BANDONED (35 U.S.C. § 133). | | | |
| Status | | | | | |
| 1) Responsive to communication(s) filed on 12 S | September 2003. | | | | |
| 2a) This action is FINAL . 2b) ⊠ Thi | s action is non-final. | | | | |
| 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is | | | | | |
| closed in accordance with the practice under | Ex parte Quayle, 1935 C. | D. 11, 453 O.G. 213. | | | |
| Disposition of Claims | | | | | |
| 4)⊠ Claim(s) <u>1-20</u> is/are pending in the application | n. | | | | |
| 4a) Of the above claim(s) is/are withdra | awn from consideration. | | | | |
| 5) Claim(s) is/are allowed. | • | | | | |
| 6)⊠ Claim(s) <u>1-20</u> is/are rejected. | | | | | |
| 7) Claim(s) is/are objected to. | | | | | |
| 8) Claim(s) are subject to restriction and/ | or election requirement. | | | | |
| Application Papers | | | | | |
| 9)☐ The specification is objected to by the Examin | er. | | | | |
| 10)⊠ The drawing(s) filed on <u>05 January 2007</u> is/are | e: a)⊠ accepted or b)□ | objected to by the Examiner. | | | |
| Applicant may not request that any objection to the | e drawing(s) be held in abeya | nce. See 37 CFR 1.85(a). | | | |
| Replacement drawing sheet(s) including the correct | ction is required if the drawin | g(s) is objected to. See 37 CFR 1.121(d). | | | |
| 11)☐ The oath or declaration is objected to by the E | xaminer. Note the attache | ed Office Action or form PTO-152. | | | |
| Priority under 35 U.S.C. § 119 | | | | | |
| 12) Acknowledgment is made of a claim for foreig | n priority under 35 U.S.C. | § 119(a)-(d) or (f). | | | |
| a) ☐ All b) ☐ Some * c) ☐ None of: | | | | | |
| Certified copies of the priority document | its have been received. | | | | |
| Certified copies of the priority document | nts have been received in | Application No | | | |
| 3. Copies of the certified copies of the price | ority documents have bee | n received in this National Stage | | | |
| application from the International Burea | au (PCT Rule 17.2(a)). | | | | |
| * See the attached detailed Office action for a lis | t of the certified copies no | t received. | | | |
| | | | | | |
| Attachment(s) | | | | | |
| 1) Notice of References Cited (PTO-892) | 4) Interview | Summary (PTO-413) | | | |
| 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No | (s)/Mail Date | | | |
| 3) Information Disclosure Statement(s) (PTO/SB/08) | 5) L Notice of | Informal Patent Application | | | |

U.S. Patent and Trademark Office PTOL-326 (Rev. 08-06)

3) Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 1/19/06, 9/12/03.

6) Other: ____.

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DETAILED ACTION

Information Disclosure Statement

1. The information disclosure statement (IDS) submitted on 19 January2006 was filed after the mailing date of the application for patent on 12 September 2003. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 3. Claims 1-6 are rejected under 35 U.S.C. 102(b) as being anticipated by Ligtenberg et al (US Patent No. 4,722,348), hereinafter Ligtenberg ('348).

Ligtenberg ('348) discloses a catheter comprising a support member operatively connected to a flexible engaging member, and Wheatstone bridge circuit affixed to the engaging member, wherein the bridge constitutes a strain gauge that detects deflection of the engaging member as claimed in the instant application (Figs. 1 & 2, col. 1 lines 65-68, col. 2 lines 20-24, col. 3 lines 26-31). The Wheatstone bridge disclosed in the reference also constitutes an electrical circuit as recited in claim 3 of the instant application, and it includes several resistors, which comprise the additional strain gauge recited in claim 5 of the instant application. Ligtenberg ('348) shows that the support member is proximate the strain gauge as recited in claim 6 of the instant application (Fig. 2).

Claim Rejections - 35 USC § 103

- 4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

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5. Claims 7-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ligtenberg ('348) in view of Ferre (5,803,809), previously made of record by Applicant, hereinafter Ferre ('809).

Ligtenberg ('348) discloses a medical instrument having a deflection tracking system as previously discussed for claims 1-6. Ligtenberg ('348) lacks at least one of an electromagnetic, optical, inertial position and ultrasound system configured to track said medical instrument. Ferre ('809) teaches a system for tracking a medical instrument using electromagnetic or ultrasonic means (col. 4 lines 25-29). The system and method of Ferre ('809) are taught to include means and steps for displaying the position of the medical instrument within the operating area of the patient. It would have been obvious to one of ordinary skill in the art at the time of invention to use the medical instrument of Ligtenberg ('348) with the position tracking system of Ferre ('809) in order to allow a physician to accurately localize the medical instrument during operation, as is well known in the art. Modifying the Ligtenberg ('348) invention to include a position tracking system constitutes an obvious improvement to the reference system and method, the improvement being part of the ordinary capabilities of a person having reasonable skill in the art at the time of invention.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Webler (US PG Pubs. No. 20070055142 A1) teaches methods and systems for tracking the position of a Swan Ganz catheter, which is known in the art to include deflection detecting means, such as the strain gauge claimed in the instant application.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Parikha S. Mehta whose telephone number is 571.272.3248. The examiner can normally be reached on M-F, 8 - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Casler can be reached on 571.272.4956. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Parikha S. Mehta

Examiner - Art Unit 3737

SUPERVISORY PATENT EXCAMPENT TECHNOLOGY CENTER (1999)